

What is Claimed is:

1. An article conveying apparatus for conveying articles between a plurality of article storage sections for storing therein the articles and a predetermined entry and exit port, the apparatus comprising:

a running truck body formed of a square cylinder and guided along a track laid along the article storage sections, to run in a longitudinal direction;

a platform provided with a transfer device for transferring articles; and

raising and lowering poles, each formed of a square cylinder, and guiding and supporting said platform to be capable of freely ascending and descending,

wherein the cylinder forming said raising and lowering pole is connected, at its lower end part, perpendicularly to a longitudinal side of the cylinder forming said running truck body.

2. An article conveying apparatus for conveying articles between a plurality of article storage sections for storing therein the articles and a predetermined entry and exit port, the apparatus comprising:

a running truck body that runs in a longitudinal direction along a track laid along the article storage sections;

a platform provided with a transfer device for transferring articles;

an upper truck body guided along an upper track laid on a ceiling to face toward the track; and

raising and lowering poles for guiding and supporting said platform to be capable of freely ascending and descending,

wherein each of said raising and lowering poles has a lower end connected to a longitudinal side of said running truck body and an upper end connected perpendicularly to a longitudinal side of said upper truck body.

3. The article conveying apparatus according to claim 2, wherein said upper truck body and said running truck body are each located on the same side of said raising and lowering poles.

4. The article conveying apparatus according to claim 2, wherein a laterally central position of said raising and lowering pole is substantially a laterally central position of the article conveying apparatus running in the longitudinal direction.

5. An article conveying apparatus for conveying articles between a plurality of article storage sections for storing therein the articles and a predetermined entry and exit port, the apparatus comprising:

a running truck body that runs in a longitudinal direction along a track laid along the article storage sections;

a platform provided with a transfer device for transferring articles; and

raising and lowering poles, each connected perpendicularly to said running truck body, and guiding and supporting said platform to be capable of freely ascending and descending,

wherein said running truck body has a longitudinal side connected to a lower end of each of said raising and lowering poles, and is supported by wheels provided in alignment with the respective positions where said raising and lowering poles are connected to the running truck body.

6. An article conveying apparatus for conveying articles between a plurality of article storage sections for storing therein the articles and a predetermined entry and exit port, the apparatus comprising:

a running truck body that runs in a longitudinal direction along a track laid along the article storage sections;

a platform provided with a transfer device for transferring articles;

a longitudinal pair of raising and lowering poles connected perpendicularly to a longitudinal side of said running truck body at respective ends of said running

truck body, and guiding and supporting said platform to be capable of freely ascending and descending;

a pair of raising and lowering ropes each having one end connected to an upper part of a corresponding longitudinal side of said platform, and suspending and supporting said platform; and

a driving wheel for feeding and winding said pair of raising and lowering ropes,

wherein said raising and lowering ropes constituting the pair are each guided from the upper part of the corresponding longitudinal side of said platform to the vicinity of the center of said running truck body via said driving wheel, and has the other end connected to the vicinity of the center of said platform.

7. The article conveying apparatus according to claim 6, wherein a tension setting device is located in said platform to set a tension of said pair of raising and lowering ropes.

8. The article conveying apparatus according to claim 1, wherein a running drive device for driving wheels supporting said running truck body is disposed at a longitudinal side of said running truck body that is opposite the side at which said raising and lowering poles are connected to the running truck body.

9. The article conveying apparatus according to claim 1, wherein a raising and lowering drive device for raising and lowering said platform is located at a latitudinal side of said running truck body.

10. The article conveying apparatus according to claim 1, wherein a control panel for the article conveying apparatus having at least one swinging door provided to face in the longitudinal direction has sides extending in the longitudinal direction, and is located outside the corresponding one of said raising and lowering poles.

11. The article conveying apparatus according to claim 1, wherein a contact surface that comes into contact with a shock absorber located at a terminal end of the track is provided at a longitudinal side of each end of said running truck body and inside the corresponding one of the longitudinal ends of the running truck body.